



## Features

- Carbon element
- Insulated shaft
- Snap-in clip
- Center detent option
- RoHS compliant\*



## PTV09 Series - 9 mm Potentiometer

### Electrical Characteristics

Taper..... Linear, audio  
 Standard Resistance Range  
 ..... 1 K ohms to 1 M ohms  
 Standard Resistance Tolerance..... ±20 %  
 Residual Resistance  
 ..... 500 ohms or ±1 % max.

### Environmental Characteristics

Operating Temperature... -10 °C to +50 °C  
 Power Rating  
 (Linear and Audio)..... 0.05 watt  
 Maximum Operating Voltage  
 (Linear and Audio).... 20 VDC, 50 VAC  
 Sliding Noise ..... 100 mV max.

### Mechanical Characteristics

Mechanical Angle ..... 280 ° ±5 °  
 Rotational Torque ..... 10 to 100 g-cm  
 Detent Torque ..... 40 to 200 g-cm  
 Stop Strength ..... 2 kg-cm min.  
 Rotational Life ..... 10,000 cycles  
 Soldering Condition  
 ..... 300 °C max. within 3 seconds  
 Hardware ..... No hardware supplied

### How To Order

**PTV09A - 2 0 20 F - B 203**

Model \_\_\_\_\_  
 Terminal Configuration (Pin Layout)  
 • 2 = PC Pins Vertical/Side Exit  
 • 4 = PC Pins Horizontal/Rear Mount  
 Option \_\_\_\_\_  
 • 0 = No Detent  
 • 2 = Center  
 Standard Shaft Length \_\_\_\_\_  
 • 15 = 15 mm  
 • 20 = 20 mm  
 • 25 = 25 mm  
 • 30 = 30 mm  
 Shaft Style \_\_\_\_\_  
 • F = Flat Type Insulated Shaft  
 • S = Insulated Knurled (18 Teeth)  
 • U = Insulated Knurled (40 Teeth)  
 Resistance Taper \_\_\_\_\_  
 • A = Audio Taper  
 • B = Linear Taper  
 Resistance Code (See Table) \_\_\_\_\_  
 Other styles available.

### Product Dimensions

PTV09A-2 (with shaft style F)



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

### F-Type Shaft

L	15	20	25	30
	(.591)	(.787)	(.984)	(1.181)
F	6	7	12	12
	(.236)	(.275)	(.472)	(.472)

DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

PTV09A-4 (with shaft style F)



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

### Standard Resistance Table

Resistance (Ohms)	Resistance Code
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

\*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

# Applications

- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

## PTV09 Series - 9 mm Potentiometer



### Product Dimensions

**PTV09A-2**  
(with shaft style U)



**PTV09A-4**  
(with shaft style U)



#### RECOMMENDED PCB LAYOUT



DIMENSIONS:  $\frac{\text{MM}}{\text{INCHES}}$

#### RECOMMENDED PCB LAYOUT



### Shaft Styles

**S-Type**



**U-Type**



#### S-Type Shaft

L	15 (.591)	20 (.787)	25 (.984)	30 (1.181)
A	7 (.275)	7 (.275)	7 (.275)	7 (.275)

#### U-Type Shaft

L	15 (.591)	20 (.787)	25 (.984)	30 (1.181)
K	6 (.236)	7 (.275)	7 (.275)	7 (.275)

### Derating Curve

